

Work Order ID 135512

Wednesday, August 12, 2015 4:31:41 PM

647.1712  
B135512  
REV. 0

\*135512\*

Try to do before Nov 3-4.

Page 1

Item ID: 647.1712

Revision ID:

Item Name: Gusset

Start Date: 8/12/15 Start Qty: 5.00

Required Date: 8/12/15 Req'd Qty: 5.00

Reference:

Accept

\*N900040100\*

Setup Start \*NS1\*

Stop \*NS2\*

Cust Item ID:

Customer:

\*5\* 15  
\*5\* 15

Approvals: Process Plan: MLS Date: AUG 14 2015

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start \*NR1\*

Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

|          |              |
|----------|--------------|
| Draw Nbr | Revision Nbr |
| 647.1700 | D            |

110

0.00

\*110\*

Waterjet

FLOW CNC Waterjet

Memo

0.00

1-Cut as per Dwg

Dwg Rev: D

Prog Rev: D

2-Deburr if necessary

(15)

08/15/10/28

120

QC2- Inspect parts off machine FAI/FAIB

0.00

\*120\*

QC

Quality Control

Memo

0.00

(15)

08/15/10/28

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                    |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                                                                                                    |  |
| Date :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Step #:                                                                                                                                                                            | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | MRB (QS1042) Approval                                                                                              |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                    | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Completed By<br><br><br>Lead hand / Supervisor<br>Approval Verification<br><br><br>QC / QA Coordinator<br>Approval |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                    |  |
| <b>Root Cause</b><br><div style="display: flex;"> <div style="flex: 1;">           Environment <input type="checkbox"/><br/>           Design <input type="checkbox"/><br/>           Doc/Data <input type="checkbox"/><br/>           Equip/Tooling <input type="checkbox"/><br/>           Handling/Pre <input type="checkbox"/><br/>           Material <input type="checkbox"/><br/>           Internal Transport <input type="checkbox"/><br/>           Tribal Knowledge <input type="checkbox"/><br/>           LOA <input type="checkbox"/><br/>           Substation <input type="checkbox"/><br/>           Past Expiry Date <input type="checkbox"/><br/>           Misidentified <input type="checkbox"/> </div> <div style="flex: 1;">           No Re-verification <input type="checkbox"/><br/>           Operator <input type="checkbox"/><br/>           Offset/Setup <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Training <input type="checkbox"/><br/>           Use for Testing <input type="checkbox"/><br/>           Poor Information <input type="checkbox"/><br/>           Rushing <input type="checkbox"/><br/>           Product Improvement <input type="checkbox"/><br/>           Process Improvement <input type="checkbox"/><br/>           Manufacturing Process <input type="checkbox"/><br/>           Past Due <input type="checkbox"/> </div> </div> |                                                                                                                                                                                    | <b>FAULT CATEGORY</b><br><div style="display: flex;"> <div style="flex: 1;">           Pressure/Forced <input type="checkbox"/><br/>           Bending <input type="checkbox"/><br/>           Centre Not Concentric <input type="checkbox"/><br/>           Cracks <input type="checkbox"/><br/>           Crimp/Kink/Ripple/Wave <input type="checkbox"/><br/>           Cuffs <input type="checkbox"/><br/>           Crushing <input type="checkbox"/><br/>           Heat Treat <input type="checkbox"/><br/>           Wave/Twist in Tube <input type="checkbox"/><br/>           Marks/Chatter <input type="checkbox"/> </div> <div style="flex: 1;">           Temperature/Cure <input type="checkbox"/><br/>           Set-up <input type="checkbox"/><br/>           BOM/Route <input type="checkbox"/><br/>           Broken/Damage/Defect <input type="checkbox"/><br/>           Inspection Incomplete/Unqualified <input type="checkbox"/><br/>           Contamination <input type="checkbox"/><br/>           Countersink <input type="checkbox"/><br/>           Cut Too Short <input type="checkbox"/><br/>           Instructions Incomplete/Unclear <input type="checkbox"/><br/>           Drill Holes <input type="checkbox"/> </div> <div style="flex: 1;">           Power Loss/Surge <input type="checkbox"/><br/>           Folio/Program <input type="checkbox"/><br/>           Grain <input type="checkbox"/><br/>           Weld <input type="checkbox"/><br/>           Wrong Stock Pulled <input type="checkbox"/><br/>           Out of Sequence <input type="checkbox"/><br/>           Off-set <input type="checkbox"/><br/>           Mislabelled <input type="checkbox"/><br/>           Fit/Function <input type="checkbox"/><br/>           Misaligned/off center <input type="checkbox"/> </div> <div style="flex: 1;">           Positioned Wrong <input type="checkbox"/><br/>           Outside Dimensions <input type="checkbox"/><br/>           Over/Under tolerance <input type="checkbox"/><br/>           Part Incorrect <input type="checkbox"/><br/>           Part Lost/Missing <input type="checkbox"/><br/>           Part Moved <input type="checkbox"/><br/>           Drawing <input type="checkbox"/><br/>           Finish <input type="checkbox"/><br/>           Misread <input type="checkbox"/><br/>           Turning Sequence <input type="checkbox"/> </div> </div> |  |                                                                                                                    |  |
| OTHER : <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                    |  |

# Work Order ID 135512

Wednesday, August 12, 2015 4:31:41 PM

**\*135512\***

Page 2

Item ID: 647.1712

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Gusset

Start Date: 8/12/15

Start Qty: 5.00

**\*5\***

Cust Item ID:

Required Date: 8/12/15

Req'd Qty: 5.00

**\*5\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

QC8- Inspect parts - second check

0.00

**\*130\***

QC

Memo

0.00

Quality Control

DAS  
38  
9-89

OCT 29 2015

P.T.O.

140

Form as per dwg

0.08

**\*140\***

Brake NC

Memo

0.02

Brake NC

DAS  
30  
9-89

13

NOV 02 2015

P.T.O.

150

QC5- Inspect part completeness to step on W/O

0.00

**\*150\***

QC

Memo

0.00

Quality Control

13

DAS  
38  
9-89

NOV 03 2015

DQA:

Date: 15/01/15



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: 16/01/11

Work Order update only ☐

|                                              |                                                |                                                 |                                                            |                                                |                                               |                                              |                                                                                   |  |  |
|----------------------------------------------|------------------------------------------------|-------------------------------------------------|------------------------------------------------------------|------------------------------------------------|-----------------------------------------------|----------------------------------------------|-----------------------------------------------------------------------------------|--|--|
| Work Order: <u>135512</u>                    |                                                | DISPOSITION                                     |                                                            | AGAINST DEPARTMENT/PROCESS                     |                                               |                                              |                                                                                   |  |  |
| Part No. <u>647.1712</u>                     |                                                | Rework <input type="checkbox"/>                 |                                                            | Skid-tube <input type="checkbox"/>             | Cross tube <input type="checkbox"/>           | Water Jet <input type="checkbox"/>           | Engineering <input type="checkbox"/>                                              |  |  |
| NCR No. <u>16-5511</u>                       |                                                | Scrap <input checked="" type="checkbox"/>       |                                                            | Machining <input type="checkbox"/>             | Small Fab <input checked="" type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/>   | Quality <input type="checkbox"/>                                                  |  |  |
|                                              |                                                | Use-as-is <input type="checkbox"/>              |                                                            | Thermoforming <input type="checkbox"/>         | Finishing <input type="checkbox"/>            | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/>                                                    |  |  |
|                                              |                                                | Suspected Unapproved <input type="checkbox"/>   |                                                            | Large Fab <input type="checkbox"/>             | Composite <input type="checkbox"/>            | Supplier <input type="checkbox"/>            |                                                                                   |  |  |
| Date: <u>15.12.03</u>                        |                                                | Step #: <u>140</u>                              |                                                            | QTY Effective: <u>(2)</u>                      |                                               |                                              | MRB (QSI042) Approval                                                             |  |  |
| Description Work Order Deviation             |                                                |                                                 |                                                            | Disposition                                    |                                               |                                              | DAS 9 9-89 <b>DEC 03 2015</b>                                                     |  |  |
| 2 piece crack while bending                  |                                                |                                                 |                                                            | Scrap & destroy<br>No replace                  |                                               |                                              | DAS 30 9-89 Completed By<br><b>NOV 02 2015</b>                                    |  |  |
|                                              |                                                |                                                 |                                                            |                                                |                                               |                                              | Lead hand / Supervisor<br>Approval Verification<br>DAS 30 9-89 <b>NOV 02 2015</b> |  |  |
|                                              |                                                |                                                 |                                                            |                                                |                                               |                                              | QC / QA Coordinator<br>Approval<br>DAS 30 9-89 <b>NOV 03 2015</b>                 |  |  |
| Root Cause                                   |                                                | FAULT CATEGORY                                  |                                                            |                                                |                                               |                                              |                                                                                   |  |  |
| Environment <input type="checkbox"/>         | No Re-verification <input type="checkbox"/>    | Pressure/Forced <input type="checkbox"/>        | Temperature/Cure <input type="checkbox"/>                  | Power Loss/Surge <input type="checkbox"/>      | Positioned Wrong <input type="checkbox"/>     |                                              |                                                                                   |  |  |
| Design <input type="checkbox"/>              | Operator <input type="checkbox"/>              | Bending <input checked="" type="checkbox"/>     | Set-up <input type="checkbox"/>                            | Folio/Program <input type="checkbox"/>         | Outside Dimensions <input type="checkbox"/>   |                                              |                                                                                   |  |  |
| Doc/Data <input type="checkbox"/>            | Offset/Setup <input type="checkbox"/>          | Centre Not Concentric <input type="checkbox"/>  | BOM/Route <input type="checkbox"/>                         | Grain <input type="checkbox"/>                 | Over/Under tolerance <input type="checkbox"/> |                                              |                                                                                   |  |  |
| Equip/Tooling <input type="checkbox"/>       | Supplier <input type="checkbox"/>              | Cracks <input checked="" type="checkbox"/>      | Broken/Damage/Defect <input type="checkbox"/>              | Weld <input type="checkbox"/>                  | Part Incorrect <input type="checkbox"/>       |                                              |                                                                                   |  |  |
| Handling/Pre <input type="checkbox"/>        | Training <input type="checkbox"/>              | Crimp/Kink/Ripple/Wave <input type="checkbox"/> | Inspection Incomplete/Unqualified <input type="checkbox"/> | Wrong Stock Pulled <input type="checkbox"/>    | Part Lost/Missing <input type="checkbox"/>    |                                              |                                                                                   |  |  |
| Material <input checked="" type="checkbox"/> | Use for Testing <input type="checkbox"/>       | Cuffs <input type="checkbox"/>                  | Contamination <input type="checkbox"/>                     | Out of Sequence <input type="checkbox"/>       | Part Moved <input type="checkbox"/>           |                                              |                                                                                   |  |  |
| Internal Transport <input type="checkbox"/>  | Poor Information <input type="checkbox"/>      | Crushing <input type="checkbox"/>               | Countersink <input type="checkbox"/>                       | Off-set <input type="checkbox"/>               | Drawing <input type="checkbox"/>              |                                              |                                                                                   |  |  |
| Tribal Knowledge <input type="checkbox"/>    | Rushing <input type="checkbox"/>               | Heat Treat <input type="checkbox"/>             | Cut Too Short <input type="checkbox"/>                     | Mislabeled <input type="checkbox"/>            | Finish <input type="checkbox"/>               |                                              |                                                                                   |  |  |
| LOA <input type="checkbox"/>                 | Product Improvement <input type="checkbox"/>   | Wave/Twist in Tube <input type="checkbox"/>     | Instructions Incomplete/Unclear <input type="checkbox"/>   | Fit/Function <input type="checkbox"/>          | Misread <input type="checkbox"/>              |                                              |                                                                                   |  |  |
| Substation <input type="checkbox"/>          | Process Improvement <input type="checkbox"/>   | Marks/Chatter <input type="checkbox"/>          | Drill Holes <input type="checkbox"/>                       | Misaligned/off center <input type="checkbox"/> | Turning Sequence <input type="checkbox"/>     |                                              |                                                                                   |  |  |
| Past Expiry Date <input type="checkbox"/>    | Manufacturing Process <input type="checkbox"/> |                                                 |                                                            |                                                |                                               |                                              |                                                                                   |  |  |
| Misidentified <input type="checkbox"/>       | Past Due <input type="checkbox"/>              | OTHER :                                         |                                                            |                                                |                                               |                                              |                                                                                   |  |  |

**Work Order ID 135512**

Wednesday, August 12, 2015 4:31:41 PM

**\*135512\***

Page 3

Item ID: 647.1712

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Gusset

Start Date: 8/12/15 Start Qty: 5.00 **\*5\***

Cust Item ID:

Required Date: 8/12/15 Req'd Qty: 5.00 **\*5\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***  
Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description                      | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|-----------------------------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 160                            | Outsource process-Anodize per QSI017 4.1.10.1 | 0.00                 |         |        |              |               |               |                  |                |
| <b>*160*</b>                   |                                               |                      |         |        |              |               |               |                  |                |
| Outsource4                     | Memo                                          | 0.00                 |         |        |              |               |               |                  |                |
| Outsource process - Anodize    | Issue P/O to ATG : <u>30385</u>               |                      |         |        |              |               |               |                  |                |
|                                | 1- Black Anodize as per Dwg, SEE NOTE #3      |                      |         |        |              |               |               |                  |                |
|                                | 2- PRIME AS PER DWG, SEE NOTE #3              |                      |         |        |              |               |               |                  |                |
|                                | Certification of Comformity is required       |                      |         |        |              |               |               |                  |                |
| 170                            | Receive & Inspect for Damage & Mat'l Certs    | 0.00                 |         |        |              |               |               |                  |                |
| <b>*170*</b>                   |                                               |                      |         |        |              |               |               |                  |                |
| Packaging                      | Memo                                          | 0.00                 |         |        |              |               |               |                  |                |
| Packaging                      |                                               |                      |         |        |              |               |               |                  |                |
| 180                            | QC5- Inspect part completeness to step on W/O | 0.00                 |         |        |              |               |               |                  |                |
| <b>*180*</b>                   |                                               |                      |         |        |              |               |               |                  |                |
| QC                             | Memo                                          | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |                                               |                      |         |        |              |               |               |                  |                |

CL NOV 06 2015 13

13x 8015-11-19

13 DAS 38 9-88 NOV 20 2015

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |  |  |                                                                                                                                                     |  |  |
| Date :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | Step #:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  | MRB (QS1042) Approval<br><br><br>Completed By<br><br><br>Lead hand / Supervisor<br>Approval Verification<br><br><br>QC / QA Coordinator<br>Approval |  |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |                                                                                                                                                     |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |                                                                                                                                                     |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |                                                                                                                                                     |  |  |
| <b>Root Cause</b><br><div style="display: flex; justify-content: space-between;"> <div>           Environment <input type="checkbox"/><br/>           Design <input type="checkbox"/><br/>           Doc/Data <input type="checkbox"/><br/>           Equip/Tooling <input type="checkbox"/><br/>           Handling/Pre <input type="checkbox"/><br/>           Material <input type="checkbox"/><br/>           Internal Transport <input type="checkbox"/><br/>           Tribal Knowledge <input type="checkbox"/><br/>           LOA <input type="checkbox"/><br/>           Substation <input type="checkbox"/><br/>           Past Expiry Date <input type="checkbox"/><br/>           Misidentified <input type="checkbox"/> </div> <div>           No Re-verification <input type="checkbox"/><br/>           Operator <input type="checkbox"/><br/>           Offset/Setup <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Training <input type="checkbox"/><br/>           Use for Testing <input type="checkbox"/><br/>           Poor Information <input type="checkbox"/><br/>           Rushing <input type="checkbox"/><br/>           Product Improvement <input type="checkbox"/><br/>           Process Improvement <input type="checkbox"/><br/>           Manufacturing Process <input type="checkbox"/><br/>           Past Due <input type="checkbox"/> </div> </div> |  | <b>FAULT CATEGORY</b><br><div style="display: flex; justify-content: space-between;"> <div>           Pressure/Forced <input type="checkbox"/><br/>           Bending <input type="checkbox"/><br/>           Centre Not Concentric <input type="checkbox"/><br/>           Cracks <input type="checkbox"/><br/>           Crimp/Kink/Ripple/Wave <input type="checkbox"/><br/>           Cuffs <input type="checkbox"/><br/>           Crushing <input type="checkbox"/><br/>           Heat Treat <input type="checkbox"/><br/>           Wave/Twist in Tube <input type="checkbox"/><br/>           Marks/Chatter <input type="checkbox"/> </div> <div>           Temperature/Cure <input type="checkbox"/><br/>           Set-up <input type="checkbox"/><br/>           BOM/Route <input type="checkbox"/><br/>           Broken/Damage/Defect <input type="checkbox"/><br/>           Inspection Incomplete/Unqualified <input type="checkbox"/><br/>           Contamination <input type="checkbox"/><br/>           Countersink <input type="checkbox"/><br/>           Cut Too Short <input type="checkbox"/><br/>           Instructions Incomplete/Unclear <input type="checkbox"/><br/>           Drill Holes <input type="checkbox"/> </div> <div>           Power Loss/Surge <input type="checkbox"/><br/>           Folio/Program <input type="checkbox"/><br/>           Grain <input type="checkbox"/><br/>           Weld <input type="checkbox"/><br/>           Wrong Stock Pulled <input type="checkbox"/><br/>           Out of Sequence <input type="checkbox"/><br/>           Off-set <input type="checkbox"/><br/>           Mislabelled <input type="checkbox"/><br/>           Fit/Function <input type="checkbox"/><br/>           Misaligned/off center <input type="checkbox"/> </div> <div>           Positioned Wrong <input type="checkbox"/><br/>           Outside Dimensions <input type="checkbox"/><br/>           Over/Under tolerance <input type="checkbox"/><br/>           Part Incorrect <input type="checkbox"/><br/>           Part Lost/Missing <input type="checkbox"/><br/>           Part Moved <input type="checkbox"/><br/>           Drawing <input type="checkbox"/><br/>           Finish <input type="checkbox"/><br/>           Misread <input type="checkbox"/><br/>           Turning Sequence <input type="checkbox"/> </div> </div> |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |                                                                                                                                                     |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | OTHER : <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |                                                                                                                                                     |  |  |

**Work Order ID 135512**

Wednesday, August 12, 2015 4:31:41 PM

**\*135512\***

Page 4

Item ID: 647.1712

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Item Name: Gusset

Stop **\*NS2\***

Start Date: 8/12/15

Start Qty: 5.00

**\*5\***

Cust Item ID:

Required Date: 8/12/15

Req'd Qty: 5.00

**\*5\***

Customer:

Reference:

Approvals:

Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

210

Identify as per dwg & Stock Location: CCK036 0.00**\*210\***

Packaging

Memo

0.00

18 MLJ 15-11-20

Packaging

\*\*\*IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV\*\*\*

220

QC21- Final Inspection - Work Order Release

0.00

**\*220\***

QC

Memo

0.00

MLJ 15-11-23

Quality Control

MLJ 15-11-23

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                            |                                                |                                               |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------|-----------------------------------------------|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |                                                            |                                                |                                               |
| Date :                                                       | Step #:                                                                                                                                                                            | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                            | MRB (QSI042) Approval                          |                                               |
| Description Work Order Deviation                             |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Disposition                                                |                                                |                                               |
|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Completed By                                               |                                                |                                               |
|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Lead hand / Supervisor Approval Verification               |                                                |                                               |
|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | QC / QA Coordinator Approval                               |                                                |                                               |
| Root Cause                                                   |                                                                                                                                                                                    | FAULT CATEGORY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                            |                                                |                                               |
| Environment <input type="checkbox"/>                         | No Re-verification <input type="checkbox"/>                                                                                                                                        | Pressure/Forced <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Temperature/Cure <input type="checkbox"/>                  | Power Loss/Surge <input type="checkbox"/>      | Positioned Wrong <input type="checkbox"/>     |
| Design <input type="checkbox"/>                              | Operator <input type="checkbox"/>                                                                                                                                                  | Bending <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Set-up <input type="checkbox"/>                            | Folio/Program <input type="checkbox"/>         | Outside Dimensions <input type="checkbox"/>   |
| Doc/Data <input type="checkbox"/>                            | Offset/Setup <input type="checkbox"/>                                                                                                                                              | Centre Not Concentric <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | BOM/Route <input type="checkbox"/>                         | Grain <input type="checkbox"/>                 | Over/Under tolerance <input type="checkbox"/> |
| Equip/Tooling <input type="checkbox"/>                       | Supplier <input type="checkbox"/>                                                                                                                                                  | Cracks <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Broken/Damage/Defect <input type="checkbox"/>              | Weld <input type="checkbox"/>                  | Part Incorrect <input type="checkbox"/>       |
| Handling/Pre <input type="checkbox"/>                        | Training <input type="checkbox"/>                                                                                                                                                  | Crimp/Kink/Ripple/Wave <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Inspection Incomplete/Unqualified <input type="checkbox"/> | Wrong Stock Pulled <input type="checkbox"/>    | Part Lost/Missing <input type="checkbox"/>    |
| Material <input type="checkbox"/>                            | Use for Testing <input type="checkbox"/>                                                                                                                                           | Cuffs <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Contamination <input type="checkbox"/>                     | Out of Sequence <input type="checkbox"/>       | Part Moved <input type="checkbox"/>           |
| Internal Transport <input type="checkbox"/>                  | Poor Information <input type="checkbox"/>                                                                                                                                          | Crushing <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Countersink <input type="checkbox"/>                       | Off-set <input type="checkbox"/>               | Drawing <input type="checkbox"/>              |
| Tribal Knowledge <input type="checkbox"/>                    | Rushing <input type="checkbox"/>                                                                                                                                                   | Heat Treat <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Cut Too Short <input type="checkbox"/>                     | Mislabeled <input type="checkbox"/>            | Finish <input type="checkbox"/>               |
| LOA <input type="checkbox"/>                                 | Product Improvement <input type="checkbox"/>                                                                                                                                       | Wave/Twist in Tube <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Instructions Incomplete/Unclear <input type="checkbox"/>   | Fit/Function <input type="checkbox"/>          | Misread <input type="checkbox"/>              |
| Substation <input type="checkbox"/>                          | Process Improvement <input type="checkbox"/>                                                                                                                                       | Marks/Chatter <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Drill Holes <input type="checkbox"/>                       | Misaligned/off center <input type="checkbox"/> | Turning Sequence <input type="checkbox"/>     |
| Past Expiry Date <input type="checkbox"/>                    | Manufacturing Process <input type="checkbox"/>                                                                                                                                     | OTHER : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                            |                                                |                                               |
| Misidentified <input type="checkbox"/>                       | Past Due <input type="checkbox"/>                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                            |                                                |                                               |



# Picklist Print

Wednesday, August 12, 2015 4:31:41 PM

Page 1

Work Order ID: 135512

**\*135512\***

Parent Item: 647.1712

**\*647 1712\***

Parent Item Name: Gusset

Start Date: 8/12/15

Required Date: 8/12/15

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP REV:A 12.10.04 NEW ISSUE DD VERF:JFS

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| M7075T6S.050                    |                        | Purchased     | No          |                     |                  |                 | sf                 | 40.5000        |             | 2.17         |               |                |        |

**\*M7075T6S 050\***

7075-T6 SHEET .050

**\*\***

08/15/10/28

Location

Loc Qty

Loc Code

MAT

m131322

40.5

40.5

9.2

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                      |                       |  |                                                 |                                     |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-----------------------|--|-------------------------------------------------|-------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------------|----------------------------------|----------------------------------------|------------------------------------|----------------------------------------------|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube <input type="checkbox"/></td> <td style="border: none;">Cross tube <input type="checkbox"/></td> <td style="border: none;">Water Jet <input type="checkbox"/></td> <td style="border: none;">Engineering <input type="checkbox"/></td> </tr> <tr> <td style="border: none;">Machining <input type="checkbox"/></td> <td style="border: none;">Small Fab <input type="checkbox"/></td> <td style="border: none;">Prod. Eng. Coord. <input type="checkbox"/></td> <td style="border: none;">Quality <input type="checkbox"/></td> </tr> <tr> <td style="border: none;">Thermoforming <input type="checkbox"/></td> <td style="border: none;">Finishing <input type="checkbox"/></td> <td style="border: none;">Rec/Store/Packaging <input type="checkbox"/></td> <td style="border: none;">Other <input type="checkbox"/></td> </tr> <tr> <td style="border: none;">Large Fab <input type="checkbox"/></td> <td style="border: none;">Composite <input type="checkbox"/></td> <td style="border: none;">Supplier <input type="checkbox"/></td> <td></td> </tr> </table> |                                      |                       |  | Skid-tube <input type="checkbox"/>              | Cross tube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Cross tube <input type="checkbox"/>                                                                                                                                                | Water Jet <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Engineering <input type="checkbox"/> |                       |  |                                                 |                                     |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>                                                                                                                                                 | Prod. Eng. Coord. <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Quality <input type="checkbox"/>     |                       |  |                                                 |                                     |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>                                                                                                                                                 | Rec/Store/Packaging <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Other <input type="checkbox"/>       |                       |  |                                                 |                                     |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>                                                                                                                                                 | Supplier <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                      |                       |  |                                                 |                                     |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Date :                                                       | Step #:                                                                                                                                                                            | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                      | MRB (QS1042) Approval |  |                                                 |                                     |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Description Work Order Deviation                             |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Disposition                          |                       |  |                                                 |                                     |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                      |                       |  |                                                 |                                     |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                      |                       |  | Completed By                                    |                                     |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                      |                       |  | Lead hand / Supervisor<br>Approval Verification |                                     |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | QC / QA Coordinator<br>Approval      |                       |  |                                                 |                                     |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |

|                                             |  |                                                |  |                                                 |  |                                                            |  |
|---------------------------------------------|--|------------------------------------------------|--|-------------------------------------------------|--|------------------------------------------------------------|--|
| <b>Root Cause</b>                           |  |                                                |  | <b>FAULT CATEGORY</b>                           |  |                                                            |  |
| Environment <input type="checkbox"/>        |  | No Re-verification <input type="checkbox"/>    |  | Pressure/Forced <input type="checkbox"/>        |  | Temperature/Cure <input type="checkbox"/>                  |  |
| Design <input type="checkbox"/>             |  | Operator <input type="checkbox"/>              |  | Bending <input type="checkbox"/>                |  | Set-up <input type="checkbox"/>                            |  |
| Doc/Data <input type="checkbox"/>           |  | Offset/Setup <input type="checkbox"/>          |  | Centre Not Concentric <input type="checkbox"/>  |  | BOM/Route <input type="checkbox"/>                         |  |
| Equip/Tooling <input type="checkbox"/>      |  | Supplier <input type="checkbox"/>              |  | Cracks <input type="checkbox"/>                 |  | Broken/Damage/Defect <input type="checkbox"/>              |  |
| Handling/Pre <input type="checkbox"/>       |  | Training <input type="checkbox"/>              |  | Crimp/Kink/Ripple/Wave <input type="checkbox"/> |  | Inspection Incomplete/Unqualified <input type="checkbox"/> |  |
| Material <input type="checkbox"/>           |  | Use for Testing <input type="checkbox"/>       |  | Cuffs <input type="checkbox"/>                  |  | Contamination <input type="checkbox"/>                     |  |
| Internal Transport <input type="checkbox"/> |  | Poor Information <input type="checkbox"/>      |  | Crushing <input type="checkbox"/>               |  | Countersink <input type="checkbox"/>                       |  |
| Tribal Knowledge <input type="checkbox"/>   |  | Rushing <input type="checkbox"/>               |  | Heat Treat <input type="checkbox"/>             |  | Cut Too Short <input type="checkbox"/>                     |  |
| LOA <input type="checkbox"/>                |  | Product Improvement <input type="checkbox"/>   |  | Wave/Twist in Tube <input type="checkbox"/>     |  | Instructions Incomplete/Unclear <input type="checkbox"/>   |  |
| Substation <input type="checkbox"/>         |  | Process Improvement <input type="checkbox"/>   |  | Marks/Chatter <input type="checkbox"/>          |  | Drill Holes <input type="checkbox"/>                       |  |
| Past Expiry Date <input type="checkbox"/>   |  | Manufacturing Process <input type="checkbox"/> |  | OTHER : _____                                   |  |                                                            |  |
| Misidentified <input type="checkbox"/>      |  | Past Due <input type="checkbox"/>              |  |                                                 |  |                                                            |  |

|                                                                   |  |                     |          |
|-------------------------------------------------------------------|--|---------------------|----------|
| <b>DART AEROSPACE LTD</b>                                         |  | <b>Work Order:</b>  | 135512   |
| <b>Description:</b> Gusset                                        |  | <b>Part Number:</b> | 647.1712 |
| <b>Inspection Dwg:</b> 647.1700 <b>Rev:</b> <i>2 DEC 15-08-17</i> |  | <b>Page 1 of 1</b>  |          |

[illegible]

| Rev | Date     | Change             | Revised by | Approved |
|-----|----------|--------------------|------------|----------|
| A   | 12.10.26 | New Issue          | KJ         |          |
| B   | 12.11.26 | Dimensions updated | KJ         |          |
| C   | 12.11.30 | Dimensions updated | KJ         |          |
| D   | 13.08.23 | Dwg Rev updated    | KJ         |          |
| E   | 15.03.12 | Dwg Rev updated    | KJ         |          |

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE IS PROHIBITED.

# NOTES:

1 MATERIAL: 7075-T6 ALUMINUM PER AMS-QQ-A-250/12.

2 MATERIAL: 6061-T6 ALUMINUM BAR IAW AMS-QQ-A-250/11.

3 FINISH IAW MPP-172, SECTIONS 2.1, 3.1, & 4.2.

4. DEBURR AND BREAK ALL SHARP EDGES.

5. IDENTIFY IAW MPP-120.

6 P/N 647.1701:  
CLAMP F/N 1, 2, & 4; THEN MATE AND MATCH DRILL HOLES FROM F/N 1 & 2 ONTO F/N 3 AS SHOWN ON SHEET 2.

P/N 647.1702:  
FOLLOW SAME PROCEDURE FOR P/N 647.1702 USING F/N 9 & 10 IN PLACE OF 1 & 2.

P/N 647.1703:  
FOLLOW SAME PROCEDURE FOR P/N 647.1703 USING F/N 11, 12, & 13 IN PLACE OF F/N 1, 2, & 3, RESPECTIVELY.

7 WITH EXCEPTION OF HOLE DIMENSION, ALL DIMENSIONS SAME AS P/N 647.1710 AND P/N 647.1711. RESPECTIVELY.

8 FOR P/N 647.1701 ASSEMBLY.

9 FOR P/N 647.1702 ASSEMBLY.

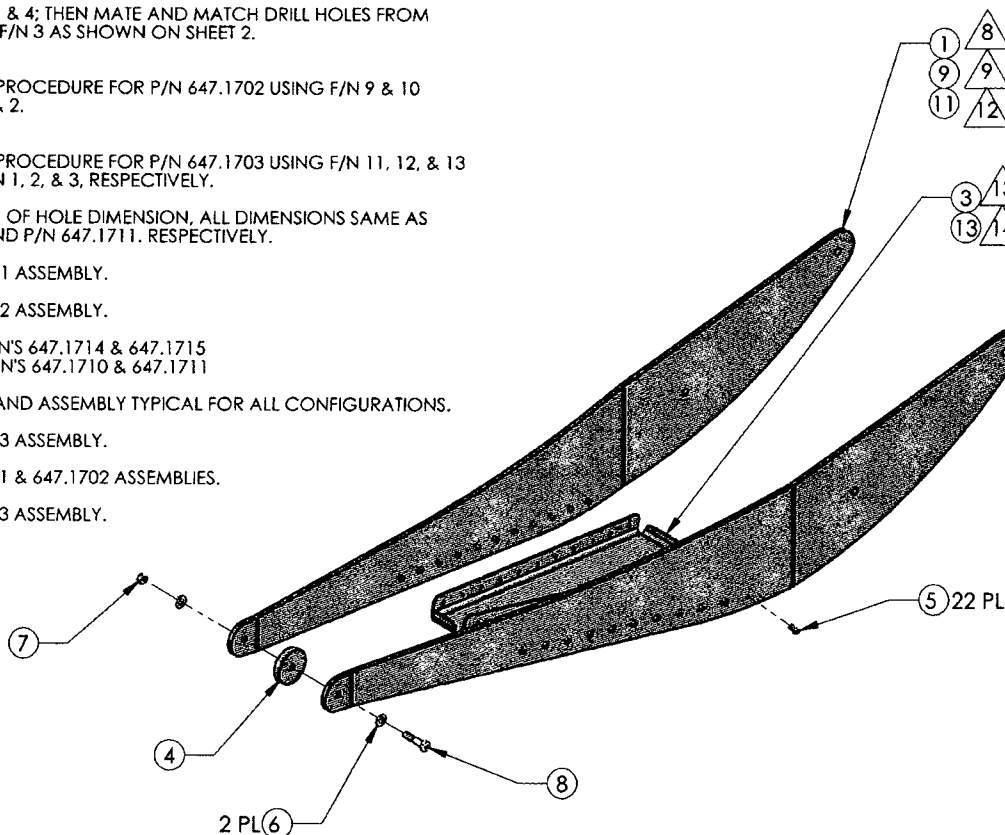
10 .323" DIA FOR P/N'S 647.1714 & 647.1715  
.257" DIA FOR P/N'S 647.1710 & 647.1711

11 RIVET SPACING AND ASSEMBLY TYPICAL FOR ALL CONFIGURATIONS.

12 FOR P/N 647.1703 ASSEMBLY.

13 FOR P/N 647.1701 & 647.1702 ASSEMBLIES.

14 FOR P/N 647.1703 ASSEMBLY.



| REVISIONS |                                         |          |          |
|-----------|-----------------------------------------|----------|----------|
| REV.      | DESCRIPTION                             | DATE     | APPROVED |
|           | LAST PROTOTYPE REVISION: PR2            |          | N/C      |
| N/C       | INITIAL RELEASE                         | 06/05/09 | P. BRAVO |
| A         | INCORPORATED ECN'S 02937 & 03921        | 06/07/13 | P. BRAVO |
| B         | INCORPORATED ECN 03970                  | 07/03/13 | P. BRAVO |
| C         | INCORPORATED ECN 04058                  | 08/14/13 | P. BRAVO |
| D         | INCORPORATED ECN'S 04679, 04702 & 04964 | 05/29/15 | P. BRAVO |

COPY  
TO  
ENGINEERING  
OLD COPY  
REVISION  
OFFICE  
ORDER

1355.12 MW  
15-08-14

|       |       |       |          |                     |               |             |
|-------|-------|-------|----------|---------------------|---------------|-------------|
| 1     |       | 13    | 647.1718 | GUSSET              |               |             |
| 1     |       | 12    | 647.1717 | PLATE               |               |             |
| 1     |       | 11    | 647.1716 | PLATE               |               |             |
|       | 1     | 10    | 647.1715 | PLATE               |               |             |
|       | 1     | 9     | 647.1714 | PLATE               |               |             |
| 1     | 1     | 8     | 601.1622 | SCREW               | MS27039-1-14  |             |
| 1     | 1     | 7     | 601.2943 | LOCKNUT             | MS21042-3     |             |
| 2     | 2     | 6     | 601.1607 | WASHER              | NAS1149F0332P |             |
| 22    | 22    | 5     | 601.1915 | RIVET               | CR3213-4-4    |             |
| 1     | 1     | 4     | 647.1713 | SPACER              |               |             |
|       | 1     | 3     | 647.1712 | GUSSET              |               |             |
|       | 1     | 2     | 647.1711 | PLATE               |               |             |
|       | 1     | 1     | 647.1710 | PLATE               |               |             |
| X     |       |       | 647.1703 | SKID DEFLECTOR ASSY |               |             |
|       | X     |       | 647.1702 | SKID DEFLECTOR ASSY |               |             |
|       |       | X     | 647.1701 | SKID DEFLECTOR ASSY |               |             |
| .1703 | .1702 | .1701 | FIND #   | PART #              | DESCRIPTION   | MAT'L SPEC. |

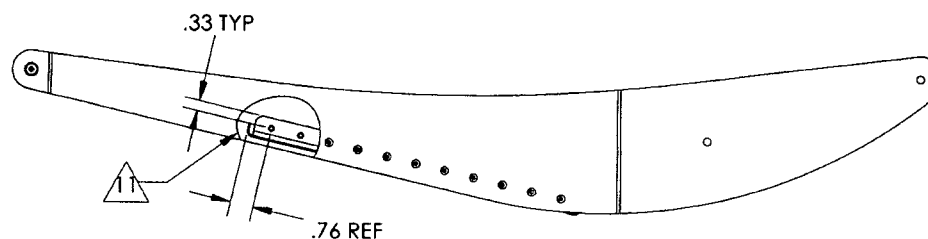
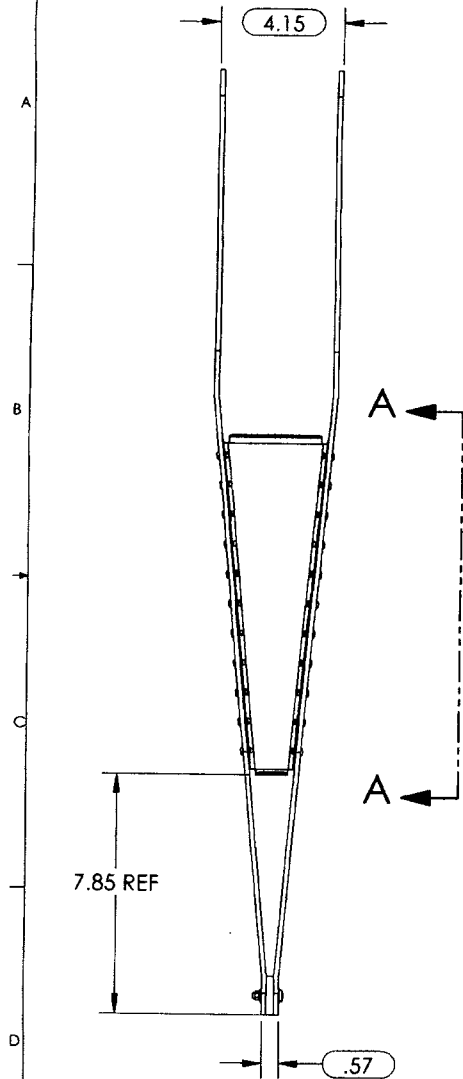
|               |           |                            |      |
|---------------|-----------|----------------------------|------|
| QTY           |           | PARTS LIST                 |      |
| NEXT ASSY (S) |           | ORIGINAL DATE              |      |
| 647.1300      |           | 06/05/09                   |      |
|               |           | DRAWN BY                   |      |
|               |           | J. GARDNER                 |      |
|               |           | P. BRAVO                   |      |
|               |           | DRAWING APPROVAL           |      |
|               |           | 06/05/09                   |      |
|               |           | CONTRACT NO.               |      |
|               |           |                            |      |
|               |           | UNLESS OTHERWISE SPECIFIED |      |
|               |           | DIMENSIONS ARE IN INCHES   |      |
|               |           | TOLERANCES ARE:            |      |
|               |           | 2 PLACE DECIMALS ±.01      |      |
|               |           | 3 PLACE DECIMALS ±.005     |      |
|               |           | ANGLES ±.5°                |      |
| SIZE          | CAGE CODE | DWG. NO.                   | REV. |
| B             | 07M26     | 647.1700                   | D    |
| SCALE NONE    |           | SHEET 1 OF 7               |      |

DART AEROSPACE 3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760) 724-5300

APICAL INDUSTRIES, INC. 080 DART AEROSPACE

SKID DEFLECTOR ASSY

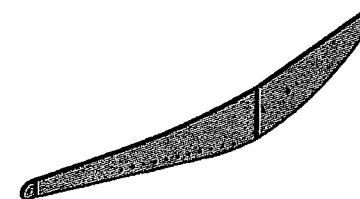
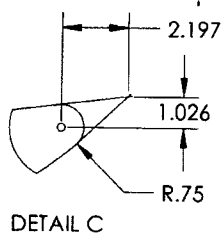
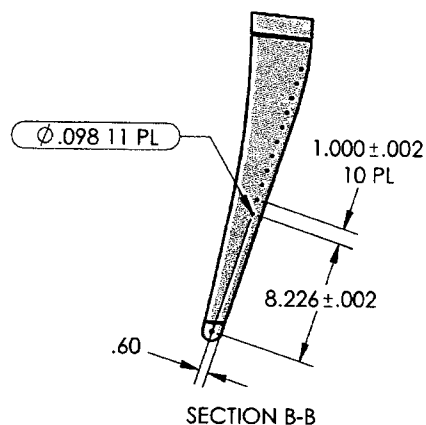
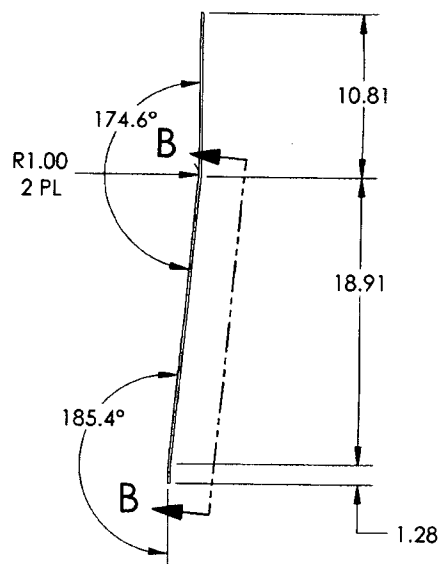
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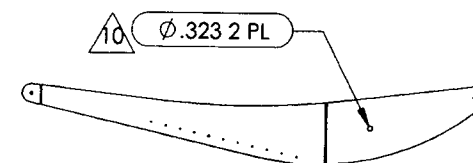
SECTION A-A

|                                                                                                                                             |  |                                                                      |                    |
|---------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------|--------------------|
| ORIGINAL DATE<br>08/05/99                                                                                                                   |  | 3030 ENTERPRISE CT.,<br>SUITE A<br>VISTA, CA 92081<br>(760) 724-5300 |                    |
| DRAWN BY<br>J. GARDNER                                                                                                                      |  | CHECKER<br>P. BRAVO                                                  |                    |
| DRAWING APPROVAL<br>P. BRAVO                                                                                                                |  | AFICAL INDUSTRIES, INC.<br>6800 DART AEROSPACE                       |                    |
| CONTRACT NO.                                                                                                                                |  | SKID DEFLECTOR ASSY                                                  |                    |
| UNLESS OTHERWISE SPECIFIED<br>DIMENSIONS ARE IN INCHES<br>TOLERANCES ARE:<br>2 PLACE DECIMALS ±.01<br>3 PLACE DECIMALS ±.005<br>ANGLES ±.5° |  | SIZE<br>B                                                            | CAGE CODE<br>07M26 |
|                                                                                                                                             |  | DWG. NO.<br>647.1700                                                 | REV.<br>D          |
|                                                                                                                                             |  | SCALE<br>NONE                                                        | SHEET<br>2 OF 7    |

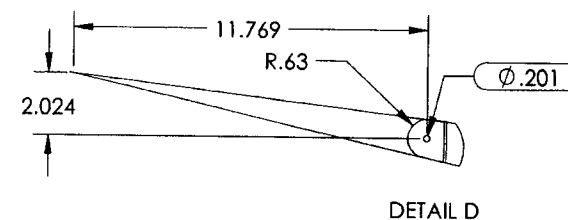
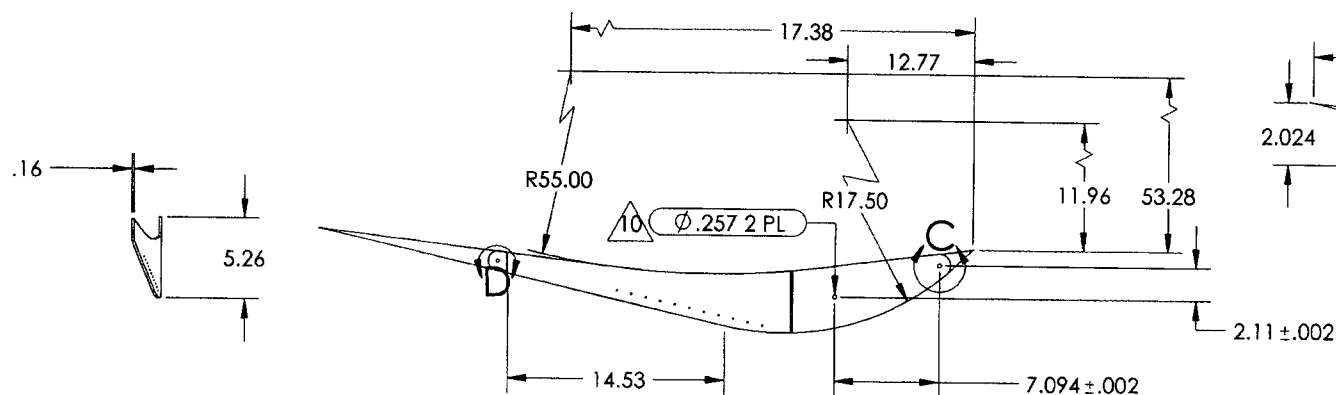
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THE WRITTEN PERMISSION OF DART AEROSPACE IS PROHIBITED.



647.1711 SHOWN  
647.1710 OPPOSITE

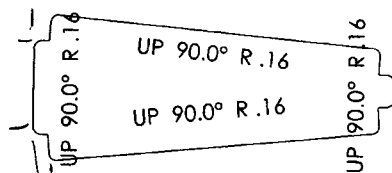
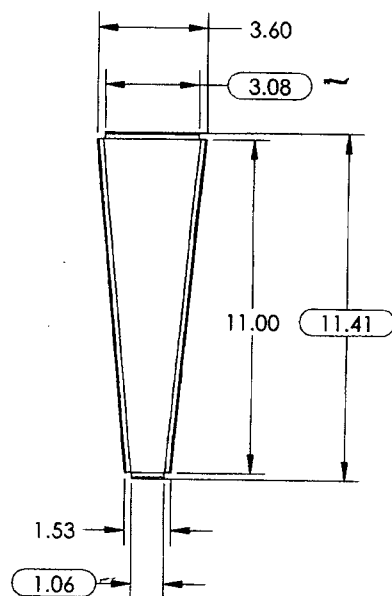


647.1714 SHOWN  $\triangle 7$   
647.1715 OPPOSITE

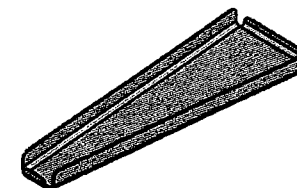


|                                                                                                                                  |                    |                                                                      |           |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------------------------------------------------------------|-----------|
| ORIGINAL DATE<br>(MM-DD-YY) 08/03/09                                                                                             |                    | 3030 ENTERPRISE CT.,<br>SUITE A<br>VISTA, CA 92081<br>(760) 691-9108 |           |
| DRAWN BY: J. GARDNER                                                                                                             |                    | P. BRAVO                                                             |           |
| DRAWING APPROVAL<br>P. BRAVO                                                                                                     |                    |                                                                      |           |
| CONTRACT NO.                                                                                                                     |                    |                                                                      |           |
| UNLESS OTHERWISE SPECIFIED<br>DIMENSIONS ARE IN INCHES<br>TOLERANCES ARE:<br>3 PLACE DECIMALS $\pm .01$<br>ANGLES $\pm .5^\circ$ |                    |                                                                      |           |
| SHEET<br>B                                                                                                                       | CAGE CODE<br>07M26 | OWG. NO.<br>647.1700                                                 | REV.<br>D |
| SCALE: NONE                                                                                                                      |                    | SHEET 3 OF 7                                                         |           |

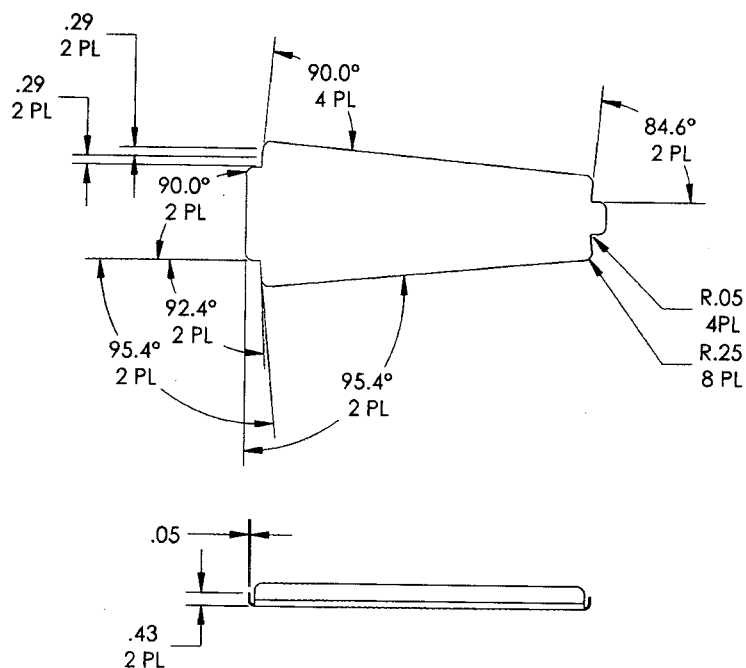
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FLAT PATTERN

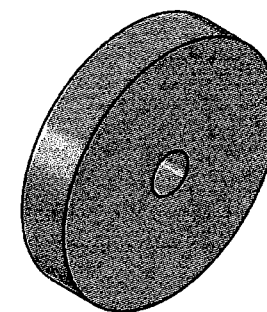
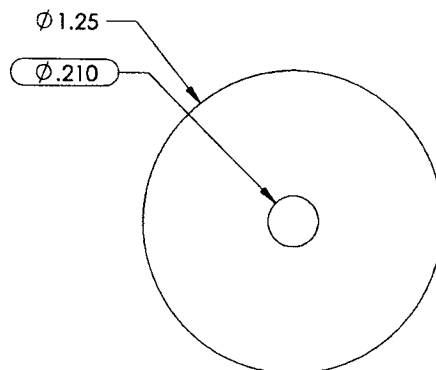
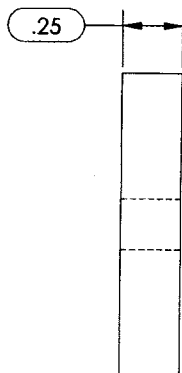


647.1712



|                                                                                                                                             |  |                                                                      |                    |
|---------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------|--------------------|
| ORIGINAL DATE<br>(MM-DD-YY) 06/05/09                                                                                                        |  | 3030 ENTERPRISE CT.,<br>SUITE A<br>VISTA, CA. 92081<br>(760)724-5300 |                    |
| DRAWN BY: J. GARDNER                                                                                                                        |  | CHECKED BY: P. BRAVO                                                 |                    |
| DRAWING APPROVAL<br>P. BRAVO                                                                                                                |  | APICAL INDUSTRIES INC.<br>dba DART AEROSPACE                         |                    |
| CONTRACT NO.                                                                                                                                |  | SKID DEFLECTOR ASSY                                                  |                    |
| UNLESS OTHERWISE SPECIFIED<br>DIMENSIONS ARE IN INCHES<br>TOLERANCES ARE:<br>2 PLACE DECIMALS ±.01<br>3 PLACE DECIMALS ±.005<br>ANGLES ±.5° |  | SIZE<br>B                                                            | CAGE CODE<br>07M16 |
|                                                                                                                                             |  | DWG. NO.<br>647.1700                                                 | REV.<br>D          |
|                                                                                                                                             |  | SCALE<br>NONE                                                        | SHEET<br>4 OF 7    |

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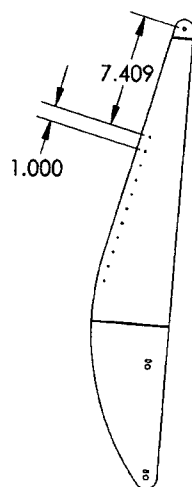
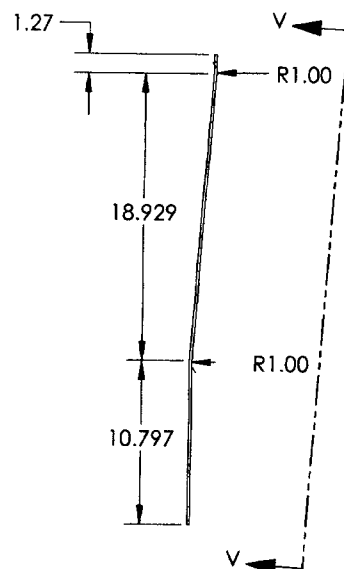


647.1713

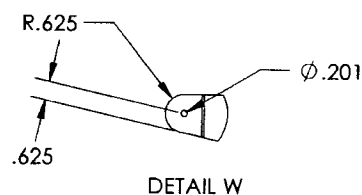
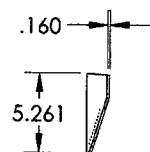
|                                                                                                                                                |                        |                                                                                                                                            |                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| ORIGINAL DATE<br>(MO-DA-YR) 08/05/09                                                                                                           |                        | <b>DART</b> 3030 ENTERPRISE CT.<br>AEROSPACE SUITE A<br>VISTA, CA 92081<br>(760) 724-5300<br>AMCAL INDUSTRIES, INC.<br>4901 DART AEROSPACE |                                             |
| DRAWN BY<br>J. GARDNER                                                                                                                         | CHECKED BY<br>P. BRAVO |                                                                                                                                            |                                             |
| DRAWING APPROVAL<br>P. BRAVO                                                                                                                   |                        |                                                                                                                                            |                                             |
| CONTRACT NO.                                                                                                                                   |                        |                                                                                                                                            |                                             |
| UNLESS OTHERWISE SPECIFIED<br>DIMENSIONS ARE IN INCHES<br>TOLERANCES ARE:<br>2 PLACE DECIMALS ± .01<br>3 PLACE DECIMALS ± .005<br>ANGLES ± .5° |                        | SIZE B<br>CAGE CODE 07M16<br>SCALE NONE                                                                                                    | DWG. NO. 647.1700<br>REV. D<br>SHEET 5 OF 7 |



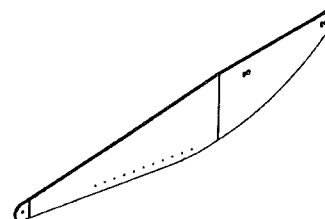
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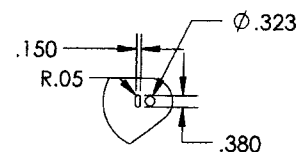
VIEW V-V



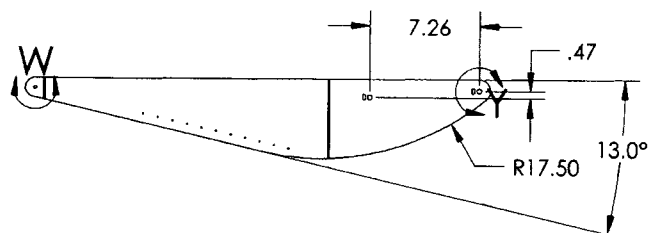
DETAIL W



647.1716 SHOWN  
647.1717 OPPOSITE



DETAIL Y  
TYP 2 PL



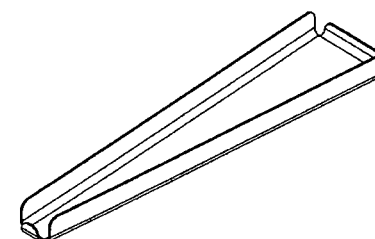
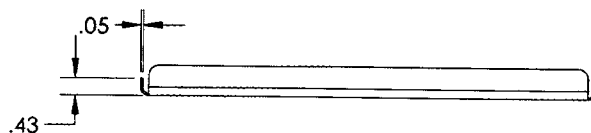
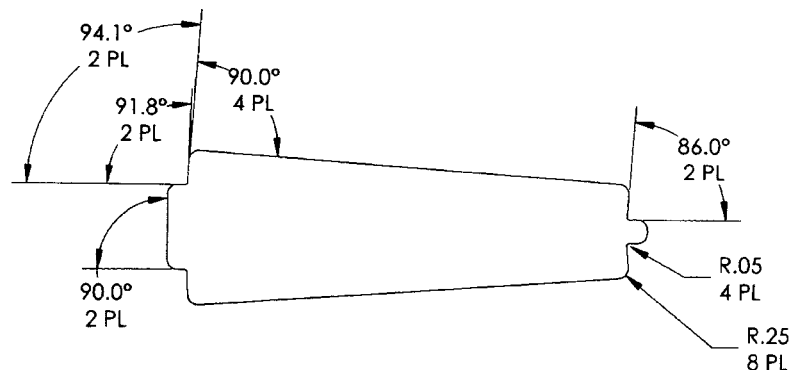
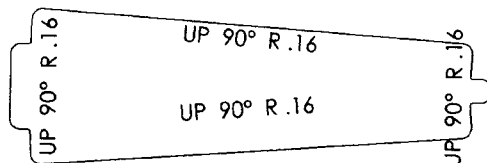
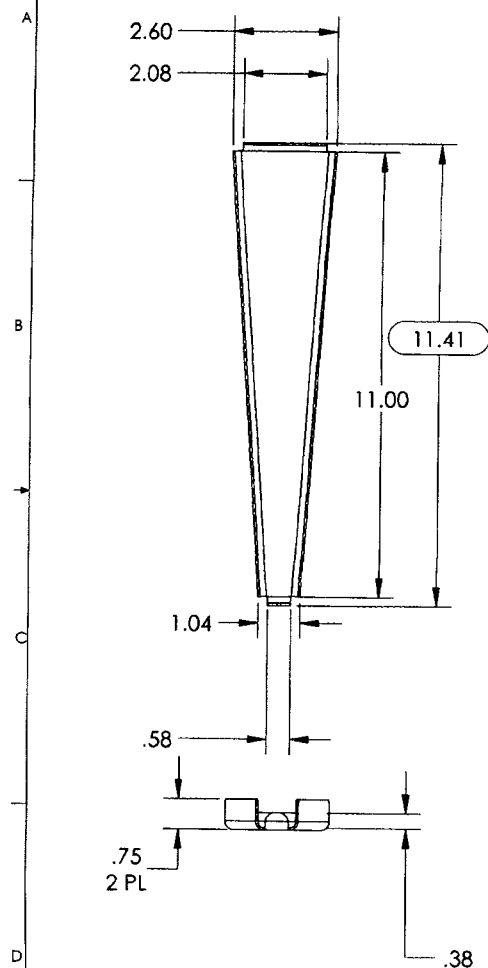
ORIGINAL DATE  
10-01-79  
DRAWN BY  
S. HUFF  
CHECKER  
P. BRAVO  
DRAWING APPROVAL  
P. BRAVO  
DATE  
08-05-80  
CONTRACT NO.

**DART** AEROSPACE  
3030 ENTERPRISE CT., SUITE A  
VISTA, CA 91081  
(760) 724-5300

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES  
TOLERANCES ARE:  
2 PLACE DECIMALS ±.01  
3 PLACE DECIMALS ±.005  
ANGLES ±.5°

SKID DEFLECTOR ASSY  
SHEET 6 OF 7  
SCALE NONE  
REV. D

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647.1718

|                                                                                                                                             |  |                     |                      |
|---------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------|----------------------|
| ORIGINAL DATE<br>06-04-78                                                                                                                   |  | 08-05-09            |                      |
| DRAWN BY<br>S. HUFF                                                                                                                         |  | CHECKER<br>P. BRAVO |                      |
| DRAWING APPROVAL<br>P. BRAVO                                                                                                                |  | 08-05-09            |                      |
| CONTRACT NO.                                                                                                                                |  |                     |                      |
| UNLESS OTHERWISE SPECIFIED<br>DIMENSIONS ARE IN INCHES<br>TOLERANCES ARE:<br>2 PLACE DECIMALS ±.01<br>3 PLACE DECIMALS ±.005<br>ANGLES ±.5° |  |                     |                      |
| SITE<br>B                                                                                                                                   |  | CAGE CODE<br>07M26  | DWG. NO.<br>647.1700 |
| SCALE<br>NONE                                                                                                                               |  | REV.<br>D           |                      |
| SHEET<br>7 OF 7                                                                                                                             |  |                     |                      |

**DART** 3030 ENTERPRISE CT., SUITE A  
AEROSPACE VISTA CA. 92081  
APICAL INDUSTRIES, INC. (760) 724-5300  
c/o DART AEROSPACE

SKID DEFLECTOR ASSY



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO30385

Purchase Order Date 11/6/2015  
PO Print Date 11/10/2015

Page Number 4 of 7

**Order From :**

A.T.G. INDUSTRIES INC.  
731 INDUSTRIELLE ROAD  
ROCKLAND, ON K4K 1T2  
CANADA

VC-ATG001

**Ship To : DART AEROSPACE LTD**

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**Contact Name**

**Vendor Phone** 613-446-4544

**Ship To Contact**

**Ship To Phone**

**Ship Via:**

VENDOR'S TRUCK

**Ship Acct:**

**Buyer**

Chantal Lavoie

**Customer POID**

**Customer Tax #**

10127-2607

**Terms**

Net 30

**Currency**

CAD

**FOB**

FCA - (Free Carrier)

9 135512 ✓ 647.1712 GUSSET REV. D 11/18/2015 15.00 ✓ \$12.65 \$189.75

Yes

11/18/2015

FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE I CLASS N

**Line Total:**

\$189.75

10 138505

647.7812 CENTER  
PLATE, UPPER REV. N/C

11/18/2015

8.00 ✓

\$8.75

\$70.00

Yes

11/18/2015

FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE I CLASS N

**Line Total:**

\$70.00

11 138152

647.7814 FWD  
BRACKET REV. N/C

11/18/2015

8.00

\$6.85

\$54.80

Yes

11/18/2015

FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE I CLASS N

**Line Total:**

\$54.80

**Note:**

11/10/2015



A.T.G. Industries Inc.  
731, rue Industrielle Rd.  
PLATING DEPARTMENT  
Rockland, On K4K 1T2  
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

### Pack List

Number: 64012

Date: 19-Nov-15

#### To

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

#### Ship To

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

| Terms    |                                                                                                                                                                        | Ship Via |                      |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------|
|          |                                                                                                                                                                        |          |                      |
| Quantity | Description                                                                                                                                                            |          |                      |
| 11<br>ea | Part: 647.1710<br>PLATE<br>HARD ANODIZE BLACK<br>MIL-A-8625 TYPE III CLASS 2<br><br>PRIME MIL-P-23377J TYPE I CLASS N<br>PAINT IS SUPPLY BY CUSTOMER<br>Job: 20150848  | Rev: D   | PO: PO30385<br>Line: |
| 11<br>ea | Part: 647.1711<br>PLATE<br>HARD ANODIZE BLACK<br>MIL-A-8625 TYPE III CLASS 2<br><br>PRIME MIL-P-23377J TYPE I CLASS N<br>PAINT IS SUPPLY BY CUSTOMER<br>Job: 20150849  | Rev: D   | PO: PO30385<br>Line: |
| 13<br>ea | Part: 647.1712<br>GUSSET<br>HARD ANODIZE BLACK<br>MIL-A-8625 TYPE III CLASS 2<br><br>PRIME MIL-P-23377J TYPE I CLASS N<br>PAINT IS SUPPLY BY CUSTOMER<br>Job: 20150850 | Rev: D   | PO: PO30385<br>Line: |
| 8<br>ea  | Part: 647.7812<br>CENTER PLATE, UPPER<br>HARD ANODIZE BLACK<br>MIL-A-8625 TYPE III CLASS 2<br><br>PRIME MIL-P-23377J TYPE I CLASS N<br>PAINT IS SUPPLIED BY CUSTOMER   | Rev: N/C |                      |

8015-11-19



A.T.G. Industries Inc.  
731, rue Industrielle Rd.  
PLATING DEPARTMENT  
Rockland, On K4K 1T2  
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

### Pack List

Number: 64012

Date: 19-Nov-15

#### To

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

#### Ship To

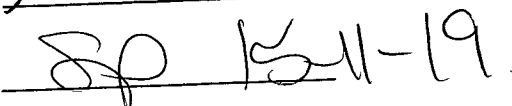
DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

| Terms    |                                                                                                                          | Ship Via |
|----------|--------------------------------------------------------------------------------------------------------------------------|----------|
| Quantity | Description                                                                                                              |          |
|          | DATE: <u>19/11/15</u>                                                                                                    |          |
|          | CERTIFIED SIGNATURE: <u></u>            |          |
|          | RECEIVER SIGNATURE: <u> 15-11-19.</u> |          |